

A LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-249. (Cancelled)

250. (Previously Presented) A method for interfacing among a terminal, a radio network and a core network connected to the radio network, wherein the terminal has a hybrid operating type being possible to be set as either a synchronous operating type or an asynchronous operating type, the method comprising the steps of:

a) recognizing an operating type of the core network on the basis of a core network operating type information and core network information contained in a message, to thereby allow the terminal to operate according to the recognized operating type of the core network.

251. (Previously Presented) The method as recited in claim 250, after the step a), further comprising the step b) of storing the recognized operating type of the core network.

252. (Previously Presented) The method as recited in claim 250, wherein the step a) includes the steps of:

a1) receiving the message having the core network operating type information through a predetermined channel;

a2) extracting the core network operating type information from the received message;
and

a3) setting an operating type of the terminal to the synchronous operating type or the asynchronous operating type on the basis of the recognized operating type of the core network.

253. (Previously Presented) The method as recited in claim 252, wherein the predetermined channel is a synchronous channel.

254. (Previously Presented) The method as recited in claim 252, wherein the predetermined channel is a broadcast control channel.

255. (Previously Presented) The method as recited in claim 250, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network.

256. (Previously Presented) The method as recited in claim 250, wherein the core network operating type information includes a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

257. (Previously Presented) The method as recited in claim 250, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network and a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

258. (Previously Presented) The method as recited in claim 250, wherein the message includes a master information block.

259. (Previously Presented) The method as recited in claim 250, wherein the message includes a system information message.

260. (Previously Presented) The method as recited in claim 250, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		GSM-MAP	
PLMN IDENTITY	C-GSM			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

261. (Previously Presented) The method as recited in claim 250, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		

>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		ANSI-41	
ANSI-41 INFORMATION ELEMENTS	C-ANSI			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

262. (Previously Presented) An apparatus for interfacing among a terminal, a radio network and a core network connected to the radio network, wherein the terminal has a hybrid operating type being possible to be set as either a synchronous operating type or an asynchronous operating type, the apparatus comprising:

detection means for recognizing an operating type of the core network on the basis of a core network operating type information and core network information in a message; and

setting means for setting an operating type of the terminal to one of the synchronous operating type and the asynchronous operating type on the basis of the recognized operating type of the core network.

263. (Previously Presented) The apparatus as recited in claim 262, further comprising a storage device for storing the recognized operating type of the core network.

264. (Previously Presented) The apparatus as recited in claim 262, wherein the detection means includes:

receiver means for receiving the message having the core network operating type information through a predetermined channel; and

extraction means for extracting the core network operating type information from the received message.

265. (Previously Presented) The apparatus as recited in claim 264, wherein the predetermined channel is a synchronization channel if the radio network is of the synchronous operating type; and a broadcast control channel if the radio network is of the asynchronous operating type.

266. (Previously Presented) The apparatus as recited in claim 262, wherein the core network operating type information includes an ANSI-41 information representing a synchronous type core network.

267. (Previously Presented) The apparatus as recited in claim 262, wherein the core network operating type information includes a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

268. (Previously Presented) The apparatus as recited in claim 262, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network and a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

269. (Previously Presented) The apparatus as recited in claim 262, wherein the message includes a master information block.

270. (Previously Presented) The apparatus as recited in claim 262, wherein the message includes a system information message.

271. (Previously Presented) The apparatus as recited in claim 262, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		GSM-MAP	
PLMN IDENTITY	C-GSM			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

272. (Previously Presented) The apparatus as recited in claim 271, wherein the message includes a public land mobile network identification (PLMN ID) if the radio network is the asynchronous operating type and the core network operating type information is GSM-MAP information representing an asynchronous type core network.

273. (Previously Presented) The apparatus as recited in claim 262, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		ANSI-41	
ANSI-41 INFORMATION ELEMENTS	C-ANSI			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

274. (Previously Presented) A method for interfacing among a terminal, a radio network and a core network connected to the radio network, the method comprising the steps of:

a) recognizing an operating type of the core network on the basis of a core network operating type information and core network information contained in a message, to thereby allow the terminal to operate according to the recognized operating type of the core network.

275. (Previously Presented) The method as recited in claim 274, after the step a), further comprising the step b) of storing the recognized operating type of the core network.

276. (Previously Presented) The method as recited in claim 274, wherein the step a) includes the steps of:

- a1) receiving the message having the core network operating type information in a predetermined location through a predetermined channel;
 - a2) extracting the core network operating type information from the received message;
- and
- a3) setting an operating type of the terminal on the basis of the recognized operating type of the core network.

277. (Previously Presented) The method as recited in claim 276, wherein the predetermined location is a core network type information field of a synchronous channel message.

278. (Previously Presented) The method as recited in claim 276, wherein the predetermined channel is a synchronous channel.

279. (Previously Presented) The method as recited in claim 276, wherein the predetermined channel is a broadcast control channel.

280. (Previously Presented) The method as recited in claim 274, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network.

281. (Previously Presented) The method as recited in claim 274, wherein the core network operating type information includes a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

282. (Previously Presented) The method as recited in claim 274, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network and a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

283. (Previously Presented) The method as recited in claim 274, wherein the message includes a master information block.

284. (Previously Presented) The method as recited in claim 274, wherein the message includes a system information message.

285. (Previously Presented) The method as recited in claim 274, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		

>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		GSM-MAP	
PLMN IDENTITY	C-GSM			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

286. (Previously Presented) The method as recited in claim 274, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		ANSI-41	
ANSI-41 INFORMATION ELEMENTS	C-ANSI			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

287. (Previously Presented) An apparatus for interfacing among a terminal, a radio network and a core network connected to the radio network, comprising:

detection means for recognizing an operating type of the core network on the basis of a core network operating type information and core network information; and

setting means for setting an operating type of the terminal on the basis of the recognized operating type of the core network.

288. (Previously Presented) The apparatus as recited in claim 287, further comprising a storage device for storing the recognized operating type of the core network.

289. (Previously Presented) The apparatus as recited in claim 287, wherein the detection means includes:

receiver means for receiving a message having the core network operating type information and core network information through a predetermined channel; and

extraction means for extracting the core network operating type information from the received message.

290. (Previously Presented) The apparatus as recited in claim 289, wherein the predetermined channel is a synchronization channel if the radio network is of the synchronous operating type; and a broadcast control channel if the radio network is of the asynchronous operating type.

291. (Previously Presented) The apparatus as recited in claim 287, wherein the core network operating type information includes an ANSI-41 information representing a synchronous type core network.

292. (Previously Presented) The apparatus as recited in claim 287, wherein the core network operating type information includes a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

293. (Previously Presented) The apparatus as recited in claim 287, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network and a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

294. (Previously Presented) The apparatus as recited in claim 289, wherein the message includes a master information block.

295. (Previously Presented) The apparatus as recited in claim 289, wherein the message includes a system information message.

296. (Previously Presented) The apparatus as recited in claim 289, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM		1 . . . <MAX SYS INFO		

INFORMATION BLOCK		BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		GSM-MAP	
PLMN IDENTITY	C-GSM			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

297. (Previously Presented) The apparatus as recited in claim 296, wherein the message includes a public land mobile network identification (PLMN ID) if the radio network is of the asynchronous operating type and the core network operating type information is GSM-MAP information representing an asynchronous type core network.

298. (Previously Presented) The apparatus as recited in claim 289, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		ANSI-41	

ANSI-41 INFORMATION ELEMENTS	C-ANSI			
------------------------------------	--------	--	--	--

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

299. (Previously Presented) A method for interfacing among a terminal, a radio network and a core network connected to the radio network, the method comprising the steps of:

a) recognizing an operating type of the core network on the basis of a core network operating type information and core network information, to thereby allow the terminal to operate according to the recognized operating type of the core network.

300. (Previously Presented) The method as recited in claim 299, after the step a), further comprising the step b) of storing the recognized operating type of the core network.

301. (Previously Presented) The method as recited in claim 299, wherein the step a) includes the steps of:

a1) receiving a message having the core network operating type information and core network information through a predetermined channel;

a2) extracting the core network operating type information from the received message;
 and

a3) setting an operating type of the terminal on the basis of the recognized operating type of the core network.

302. (Previously Presented) The method as recited in claim 301, wherein the predetermined channel is a synchronous channel.

303. (Previously Presented) The method as recited in claim 301, wherein the predetermined channel is a broadcast control channel.

304. (Previously Presented) The method as recited in claim 299, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network.

305. (Previously Presented) The method as recited in claim 299, wherein the core network operating type information includes a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

306. (Previously Presented) The method as recited in claim 299, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network and a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

307. (Previously Presented) The method as recited in claim 301, wherein the message includes a master information block.

308. (Previously Presented) The method as recited in claim 301, wherein the message includes a system information message.

309. (Previously Presented) The method as recited in claim 301, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1... <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		GSM-MAP	
PLMN IDENTITY	C-GSM			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

310. (Previously Presented) The method as recited in claim 301, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			

REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		ANSI-41	
ANSI-41 INFORMATION ELEMENTS	C-ANSI			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

311. (Previously Presented) An apparatus for interfacing among a terminal, a radio network and a core network connected to the radio network, comprising:

detection means for recognizing an operating type of the core network on the basis of a core network operating type information and core network information in a message; and

setting means for setting an operating type of the terminal on the basis of the recognized operating type of the core network.

312. (Previously Presented) The apparatus as recited in claim 311, further comprising a storage device for storing the recognized operating type of the core network.

313. (Previously Presented) The apparatus as recited in claim 311, wherein the detection means includes: receiver means for receiving the message having the core network operating type information through a predetermined channel; and extraction means for extracting the core network operating type information from the received message.

314. (Previously Presented) The apparatus as recited in claim 313, wherein the predetermined channel is a synchronization channel if the radio network is of the synchronous operating type; and a broadcast control channel if the radio network is of the asynchronous operating type.

315. (Previously Presented) The apparatus as recited in claim 311, wherein the core network operating type information includes an ANSI-41 information representing a synchronous type core network.

316. (Previously Presented) The apparatus as recited in claim 311, wherein the core network operating type information includes a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

317. (Previously Presented) The apparatus as recited in claim 311, wherein the core network operating type information includes an ANSI-41 information representing a synchronous operating type core network and a global system for mobile communications application part (GSM-MAP) information representing an asynchronous operating type core network.

318. (Previously Presented) The apparatus as recited in claim 311, wherein the message includes a master information block.

319. (Previously Presented) The apparatus as recited in claim 311, wherein the message includes a system information message.

320. (Previously Presented) The apparatus as recited in claim 311, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		GSM-MAP	
PLMN IDENTITY	C-GSM			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")

321. (Previously Presented) The apparatus as recited in claim 311, wherein the message includes a public land mobile network identification (PLMN ID) if the radio network is the asynchronous operating type and the core network operating type information is GSM-MAP information representing an asynchronous type core network.

322. (Previously Presented) The apparatus as recited in claim 311, wherein the message is represented by:

INFORMATION ELEMENT	PRESENCE	MULTI	IE TYPE AND REFERENCE	SEMANTICS DESCRIPTION
OTHER INFORMATION ELEMENTS				
MIB VALUE TAG	M			
REFERENCES TO OTHER SYSTEM INFORMATION BLOCK		1 . . . <MAX SYS INFO BLOCKS COUNT>		
>SCHEDULING INFORMATION	M			
CN INFORMATION ELEMENTS				
CN TYPE	M		ANSI-41	
ANSI-41 INFORMATION ELEMENTS	C-ANSI			

CONDITION	EXPLANATION
GSM	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " GSM-MAP") OR (CN TYPE == "GSM-MAP AND ANSI-41")
ANSI	THIS INFORMATION ELEMENT SHALL BE PRESENT IN CASE (CN TYPE == " ANSI-41") OR (CN TYPE == "GSM-MAP AND ANSI-41")